CLAIMS

What is claimed is:

1. A drilling or servicing fluid composition comprising:

an aqueous liquid as the continuous phase;

one or more surfactants;

aphrons; and

one or more aphron stabilizers, wherein at least one of said aphron stabilizers produces an average aphron half-life of greater than or equal to about 20 hours.

2. The composition according to claim 1 wherein at least one of the aphron stabilizers is comprised of a cross-linkable polymer.

3. The composition according to claim 2 wherein the cross-linkable polymer is selected from the group consisting of polyvinyl alcohol, biopolymer, polyacrylamide, derivatized HEC, liquid rubber bases, liquid wax bases, water soluble glues and mixtures thereof.

4. The composition according to claim 1 wherein at least one of the aphron stabilizers comprises polyvinyl alcohol.

5. The composition according to claim 4 wherein the aphron stabilizer further comprises betaine, alkyl ether sulfate, or mixtures thereof.

6. The composition according to claim 1 wherein the composition comprises from about 0.05% to about 2% by weight aphron stabilizer.

7. The composition according to claim 1 wherein the composition comprises from about 0.1% to about 1% by weight aphron stabilizer.

8. The composition according to claim 1 wherein the aqueous liquid is selected from the group consisting of fresh water, sea water, and brine.

9. The composition according to claim 1 wherein at least one of the surfactants is selected from the group consisting of anionic, non-ionic and cationic surfactants.

10. The composition according to claim 1 further comprising one or more viscosifiers.

11. The composition according to claim 10 wherein said one or more viscosifiers is selected from the group consisting of organic polymers, inorganic polymers, dispersed clays, dispersed minerals, mixed metal hydroxides, oxyhydroxides and oxides, biopolymers, water-soluble synthetic polymers, and mixtures thereof.

12. The composition according to claim 1 further comprising one or more additives selected from the group consisting of weighting agents, corrosion inhibitors, water-soluble salts, biocide, fungicides, seepage loss control additives, bridging agents, deflocculants, lubricity additives, shale control inhibitors, foam suppressors, emulsifying agents, wetting agents, and mixtures thereof.

13. The composition according to claim 1 wherein the composition has a pH of from about 7 to about 11.

14. The composition according to claim 1 wherein the composition has a low shear rate viscosity as measured by a Brookfield Viscometer at 0.06 sec^{-1} of at least 10,000 centipoise.

15. The composition according to claim 1 wherein the composition has a low shear rate viscosity as measured by a Brookfield Viscometer at 0.06 sec^{-1} of at least 20,000 centipoise.

16. The composition according to claim 1 wherein the composition has a low shear rate viscosity as measured by a Brookfield Viscometer at 0.06 sec^{-1} of at least 50,000 centipoise.

17. The composition according to claim 1 wherein the composition has a low shear rate viscosity as measured by a Brookfield Viscometer at 0.06 sec^{-1} of at least 100,000 centipoise.

18. The composition according to claim 1 wherein the aphrons have an average half-life of greater than or equal to about 75 hours.

19. The composition according to claim 1 wherein the aphrons have an average half-life of greater than or equal to about 150 hours.

20. The composition according to claim 1 wherein the aphrons have an average half-life of greater than or equal to about 200 hours.

21. The composition according to claim 1 wherein the aphrons are stable at pressures of greater than or equal to about 2,000 psi.

22. The composition according to claim 1 wherein the aphrons are stable at pressures of greater than or equal to about 5,000 psi.

23. The composition according to claim 1 wherein the aphrons are stable at pressures of greater than or equal to about 8,000 psi.

24. The composition according to claim 1 wherein the composition can be continuously recirculated.

25. The composition according to claim 1 wherein the aphrons prevent loss of excess drilling or servicing fluid into a formation.

26. The composition according to claim 1 wherein the aphrons effectively seal a formation.

27. A process for drilling or servicing a wellbore in a subterranean formation wherein a drilling or servicing fluid is circulated in the wellbore, comprising:

utilizing as the drilling or servicing fluid an aqueous liquid as the continuous phase, one or more surfactants, aphrons, and one or more aphron stabilizers, wherein at least one of said aphron stabilizers produces an average aphron half-life of greater than or equal to about 20 hours.

28. The process according to claim 27 wherein the aphrons have an average half-life of greater than or equal to about 75 hours.

29. The process according to claim 27 wherein the aphrons have an average half-life of greater than or equal to about 150 hours.

30. The process according to claim 27 wherein the aphrons have an average half-life of greater than or equal to about 200 hours.

31. The process according to claim 27 wherein the composition can be continuously recirculated.

32. The process according to claim 27 wherein the aphrons prevent loss of excess drilling or servicing fluid into the formation.

33. A drilling or servicing fluid composition comprising:

an aqueous liquid as the continuous phase;

one or more surfactants;

aphrons; and

one or more aphron stabilizers, wherein at least one of said aphron stabilizers comprises polyvinyl alcohol.

34. The composition according to claim 33 wherein the aphron stabilizer further comprises betaine, alkyl ether sulfate, or mixtures thereof.

35. The composition according to claim 34 wherein the composition comprises from about 0.05% to about 2% by weight aphron stabilizer.

36. The composition according to claim 33 further comprising one or more viscosifiers.

37. The composition according to claim 33 wherein the aphrons have an average half-life of greater than or equal to about 20 hours.

38. The composition according to claim 33 wherein the aphrons have an average half-life of greater than or equal to about 75 hours.

39. The composition according to claim 33 wherein the aphrons have an average half-life of greater than or equal to about 150 hours.

40. The composition according to claim 33 wherein the aphrons have an average half-life of greater than or equal to about 200 hours.